

CLAIMS

We Claim:

- 1 1. A fiber optic module package, comprising:
2 a lid having a bottom surface; and
3 a module housing having a knife-shaped edge; wherein the lid and the
4 module housing are sealed when the knife-shaped edge bites into the bottom surface of
5 the lid to form a sealing mechanism.

- 1 2. The fiber optic module package of Claim 1, further comprising a center die
2 for pressing the lid onto the module housing such that the knife-shaped edge bites into the
3 bottom surface of the module housing.

- 1 3. The fiber optic module package of Claim 1, wherein the lid has a slot with
2 an outer wall; and wherein the module housing has a side slot.

- 1 4. The fiber optic module package of Claim 3, where the lid and the module
2 housing are held together when the outer wall of the cylindrical-shaped slot of the lid
3 enters into the side slot of the module housing to form a holding mechanism.

- 1 5. The fiber optic module package of Claim 4, further comprising a
2 surrounding forming die for pressing the outer wall of the cylindrical-shaped slot of the
3 lid into the side slot of the module housing.

1 6. The fiber optic module package of Claim 1, wherein the lid is made of a
2 soft aluminum material and the module housing is made of a hard aluminum material.

1 7. The fiber optic module package of Claim 6, wherein the soft aluminum
2 material of the lid comprises Alloy 1100; and wherein and the hard aluminum material of
3 the module housing comprises Alloy 6061.

1 8. A fiber optic module package, comprising:
2 a lid having a curved surface around the outer edge of the lid; and
3 a module housing having an interior wall, wherein the lid and the module
4 housing are held together when the interior wall is pressed into the curved surface of the
5 lid to form a holding mechanism.

1 9. The fiber optic module package of Claim 8, wherein lid has a bottom
2 surface and the module housing has a knife-shaped edge; and wherein the lid and the
3 module housing are sealed when the knife-shaped edge bites into the bottom surface of
4 the lid to form a sealing mechanism.

1 10. The fiber optic module package of Claim 9, further comprising a center die
2 for pressing the lid onto the module housing such that the knife-shaped edge bites into the
3 bottom surface of the module housing.

1 11. The fiber optic module package of Claim 8, further comprising a
2 surrounding forming die for pressing the interior wall of the module housing into the
3 curved surface of the lid that serves as a holding mechanism for holding the lid and the
4 module housing together.

1 12. The fiber optical module package of Claim 8, wherein the lid is made of a
2 soft aluminum material and the module housing is made of a hard aluminum material.

1 13. The fiber optic module package of Claim 12, wherein the soft aluminum
2 material of the lid comprises Alloy 1100; and wherein and the hard aluminum material of
3 the module housing comprises Alloy 6061.

1 14. A fiber optic module package, comprising:
2 a lid; and
3 a module housing;
4 wherein the lid and the module housing are sealed together using a metal-
5 to-metal contact sealing means for hermetically sealed the lid and the module housing;
6 and wherein the lid and the module housing are held together using a holding means
7 between the lid and the module housing.

1 15. The fiber optic module package of Claim 14, wherein the lid is made of a
2 soft aluminum material and the module housing is made of a soft aluminum material.

1 16. The fiber optic module package of Claim 15, wherein the lid is made of a
2 hard aluminum material and the module housing is made of a hard aluminum material.

1 17. The fiber optic module package of Claim 14, wherein the lid is made of a
2 hard aluminum material and the module housing is made of a soft aluminum material.

1 18. The fiber optic module package of Claim 14, wherein the lid is made from
2 a first material and the module housing is made from a second material.

1 19. The fiber optic module package of Claim 18, wherein the first material of
2 the lid comprises aluminum alloy, stainless steel, copper, or titanium.

1 20. The fiber optic module package of Claim 19, wherein the second material
2 of the lid comprises aluminum alloy, stainless steel, copper, or titanium.

1 21. The fiber optic module housing of Claim 14, wherein the lid is made from
2 the same material as the module housing.

1 22. A fiber optic module package, comprising:

2 a lid having a plurality of holes and having a bottom surface; and
3 a module housing having a knife-shaped edge;
4 wherein the lid and the module housing are sealed when the knife-shaped
5 edge bites into the bottom surface of the lid to form a sealing mechanism; and wherein
6 the plurality of screws are inserted through the plurality of holes of the lid and into the
7 module housing to serve a holding mechanism for holding the lid and the module housing
8 together.